



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

November 18, 1999

WMD-SSMB

MEMORANDUM

SUBJECT: Five-Year Review
Standard Auto Bumper NPL Site
Hialeah, Dade County, Florida

FROM: Kevin S. Misenheimer, RPM *K. Misenheimer*
South Site Management Branch

TO: Richard D. Green, Director
Waste Management Division

Attached is a copy of the policy Five-Year Review for the Standard Auto Bumper NPL Site in Hialeah, Florida. Your signature is requested to formally document the completion of the Five-Year review and certifies that the selected remedies at the Site remain protective of human health and the environment.

The Standard Auto Bumper Corporation operated as a chromium and nickel plating facility whose poor waste handling procedures resulted in the contamination of soils with high concentrations of metals. EPA divided the site into two operable units which addressed soil and groundwater contamination. Two Records of Decision (RODs) were issued, the first involved the removal of soils and the second involved monitored natural attenuation of groundwater contaminants.

Contaminated soil was removed in 1994, and groundwater monitoring has taken place since then to evaluate the progress of the natural attenuation remedy. Recent groundwater sampling results show decreasing concentrations of metals to levels below MCLs. The Five-Year Review documents that the selected remedies at the Site are protective of human health and the environment. It is anticipated that no subsequent Five-Year Review will be necessary, and that site closeout and deletion from the NPL will be the next actions taken at the Site.

Please call me at extension 2-8922 if you have any questions.

MISENHEIMER

K. Misenheimer
11/18/99

MCGUIRE

[Signature]

FEHN

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11/18

GREEN

[Signature]
11/19/99



FIVE-YEAR REVIEW (Type I)

STANDARD AUTO BUMPER NATIONAL PRIORITIES LIST SITE

HIALEAH, DADE COUNTY, FLORIDA

PREPARED BY

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION IV

ATLANTA, GEORGIA

November 1999

SECTION 1.0: INTRODUCTION

EPA Region IV conducted this five-year review of the Standard Auto Bumper Superfund Site (“the Site”) pursuant to CERCLA section 121(c), NCP section 300.400 (f) (4) (ii), and OSWER Directives 9355.7-02 (May 23,1991), and 9355.7-02A (July 26, 1994). This review is a policy review. The purpose of a five-year review is to ensure that a remedial action remains protective of human health and the environment and is functioning as designed. This document will become a part of the Site file.

1.1 Site Location and Description

The Standard Auto Bumper Site is located in an industrialized area of northeast Dade County, Florida, at 2500 West 3rd Court, approximately six miles northwest of downtown Miami. The property area is approximately 42,000 square feet and is bordered by a railroad spur and a bakery to the west, a furniture manufacturer to the north, a junkyard across the street to the east and a transport company to the south.

1.2 Site History

The Standard Auto Bumper Corporation operated a chromium and nickel plating facility at the Site from 1959 until 1992. Activities at the Site included electroplating, stripping, generation of electroplating and stripping wastewater, and treatment and discharge of wastewater.

Numerous documentation of poor waste handling practices and intentional dumping at the Site precipitated an EPA Expanded Site Inspection (ESI). The ESI determined that heavy metals were at elevated concentrations in the soil and groundwater at the Site. The Site was proposed for inclusion on the National Priorities List (NPL) in June 1988 and placed on the list in October 1989. In 1989 and 1990, a removal of soil from around the building and sludge from the bottom of a drainage pit on the property was conducted by the Standard Auto Bumper Corporation under an Administrative Order for Removal with EPA. The excavated material was transported to hazardous and non-hazardous landfills according to the properties of the waste.

In December 1992, the Site was abandoned by the property owner, leaving numerous containers such as drums of waste solutions, debris and scrap metal on the site. A second removal action was necessary to address this material and was initiated by EPA in September 1993.

SECTION 2.0: DISCUSSION OF REMEDIAL OBJECTIVES

2.1 Remedy Selection

A multi-phased Remedial Investigation (RI) of the Site was conducted from 1991 to 1993 by the Environmental Services Division (ESD) of EPA. Based on sampling results of the soil, sediment, surface water, and groundwater during the early phases of the RI, EPA decided to divide the Site cleanup into two Operable Units (OU); OU1 for soil and OU2 for groundwater.

EPA issued the Record of Decision (ROD) for OU1 in September 1992. The selected remedy consisted of excavation of contaminated soil, offsite disposal of the excavated soil at a Florida Class I Landfill, and groundwater monitoring for up to 5 years. This remedy was designed to protect human health and the environment by removing the source of contamination. Source removal would prevent leaching of contaminants from the soil to the groundwater in the Biscayne aquifer, which is a major source of municipal water for residents of southeast Florida.

The ROD for OU2 was issued by EPA in December 1993. This remedy addressed groundwater contamination through natural attenuation, groundwater use controls, and groundwater monitoring for a minimum of 18 months. The remedy was designed to follow the OU1 source removal and the required groundwater monitoring was to be conducted as part of the OU1 groundwater monitoring plan.

2.2 Remedy Implementation

EPA began the removal action in September 1993 and the remedial action started four months later. EPA's Emergency Response and Removal Branch (ERRB) Technical Assistance Team (TAT), Roy F. Weston, and OHM Remediation Services carried out the OUI remedy. The ROD specified the excavation of soil contaminated with nickel, total chromium, or hexavalent chromium exceeding concentrations of 370 ppm, 519 ppm, and 52 ppb respectively. From January to March 1994, approximately 6000 cubic yards of contaminated soil were excavated from areas surrounding the Standard Auto Bumper structures and transported to the Chambers Landfill in Medley, Florida. During these activities, soil beneath the building was found to contain some of the highest concentrations of contaminants at the Site. EPA decided to complete all the excavation activities around the buildings, secure the Site, and return three months later to demolish and remove the buildings under the removal action, and excavate the remaining contaminated soils under the remedial action.

In August 1994, when ERRB returned to the Site to complete soil excavation activities, 4,847.14 tons of contaminated soil underlying the onsite buildings and concrete from the sumps and other onsite ground structures was excavated and transported to the Central Sanitary Landfill/Recycling Center in Pompano Beach, Florida.

Also in August, ESD installed and sampled groundwater monitoring wells. The construction activities for OU1 and OU2 were completed in September 1994.

Several areas of soil contamination were not excavated due to concerns about compromising the integrity of buildings and also because migration of contaminants was not a concern due to the presence of buildings and asphalt, which prevented infiltration of rainwater. The four areas of contamination that were not disturbed were: west of the Site beneath the Gilda Industries, Inc. building, north of the Site beneath a warehouse/office building, east of the Site beneath West 31 Court, and south of the Site beneath the City of Hialeah's gas main. It was determined that these soils did not present a threat to human health or the environment as long as they remained undisturbed. EPA instructed the property owners to contact EPA's Emergency Response and Removal Branch and Dade County prior to any construction, excavation or removal of any part of the building or road, that might affect the areas of contaminated soil.

2.3 Monitoring Information

OU1 required groundwater monitoring for up to five years to ensure that the soil removal actions were minimizing the impact of contaminants on the underlying aquifer. OU2 also required groundwater monitoring to insure that the natural attenuation remedy was effective.

Quarterly groundwater monitoring was conducted by the Florida Department of Environmental Protection (FDEP), beginning in June 1996. The OU2 ROD specified that groundwater monitoring would be conducted until performance standards were achieved. Performance standards for the groundwater were based on Federal Maximum Contaminant Levels (MCLs) for the following indicator chemicals:

Nickel	100 ug/L
Chromium	100 ug/L
Thallium	2 ug/L
Aluminum	200 ug/L (secondary standard)

Ten quarterly groundwater sampling events were conducted by FDEP targeting fourteen monitoring wells. The sampling data showed a pattern of exceedences of MCLs in three wells, MW-2S, MW-4SR, and MW-11S. Although there were fluctuations in contaminant concentrations from one sampling event to the next, the general trend was a decrease in contaminant concentrations. Specifically, chromium concentrations have been detected below the 100 ug/L MCL and thallium concentrations have been below the 2 ug/L MCL during the last five sampling events, from February 1998 to April 1999. Nickel was only detected below the 100 ug/L MCL once during the sampling events, but the tenth sampling event in November 1998, showed a concentration of 105 ug/L, only five ug/L above the MCL. Aluminum was detected above the secondary standard in some initial monitoring events, but since the November 1997 sampling event, aluminum concentrations have been below 200 ug/L. In February 1999, based on

ten quarters of sampling data, FDEP and EPA agreed to replace the quarterly sampling of all fourteen monitoring wells with semi-annual sampling of only the three wells with historical exceedences of MCLs. It was agreed by FDEP and EPA that this semi-annual sampling will continue until the MCL for nickel is not exceeded for a period of one year. The first semi-annual sampling event was conducted in April 1999 and showed a maximum concentration of nickel at 60 ug/L, while chromium and thallium were also below MCLs. The second semi-annual sampling event is scheduled for October 1999.

SECTION 3.0: ARARs REVIEW

The OU1 ROD required only Action-Specific, Applicable or Relevant and Appropriate Requirements (ARAR) be met. The following ARARs were applied during OU1: National Ambient Air Quality Standards, Florida Air Pollution Rules FAC 17-2.1, Florida Ambient Air Quality Standards FAC17-2.3, and the RCRA Subtitle D, FDER Class I and Dade County landfill disposal requirements. These ARARs were satisfied during the remedial action.

OU2 required that Chemical-Specific ARARs be met for the indicator chemicals, nickel, chromium and thallium. These ARARs were based on MCLs stated in the Federal Safe Drinking Water Act and the Florida Primary Drinking Water Standards. These MCLs remain unchanged and are still the basis for measuring the effectiveness of the remedy. OU2 also included ARARs for groundwater use control noted in FAC Chapter 17-524, "New Potable Water Well Permitting in Delineated Areas". This Florida rule restricts installation of new wells in delineated areas of known contamination and is applicable at the Site as long as the Chemical-Specific ARARs are exceeded.

SECTION 4.0: SUMMARY OF SITE VISIT

A site visit was not conducted by EPA at the Standard Auto Bumper Site specifically for the five-year review. However, FDEP has been on-site during groundwater monitoring events and has also inspected the Site at various other times. FDEP reported no significant problems at the Site, related to the Superfund remedy. However there have been problems with theft of the fence enclosing the site and illegal disposal of tires, drums and other debris. The current RA being implemented at the Site is monitored natural attenuation of groundwater contaminants which can not be assessed by visual site inspection.

Site inspections were conducted by EPA during the RA report and the Preliminary Close Out Report (PCOR) which documented the completion of the removal activities specified in OU1.

SECTION 5.0: AREAS OF NONCOMPLIANCE

The Standard Auto Bumper Site is in compliance with all of the requirements specified in the RODs for OU1 and OU2. The most recent groundwater monitoring results show all contaminants of concern are below performance standards. Issues related to illegal dumping at the Site have been referred to the FDEP district office and Dade County's Department of Environmental Resource Management (DERM).

SECTION 6.0: RECOMMENDATIONS

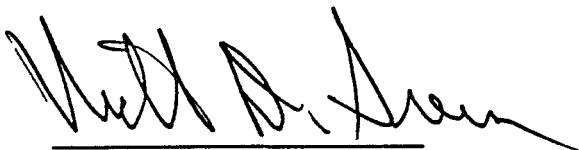
EPA recommends that semi-annual groundwater monitoring continue at the Site for the three wells (MW-2S, MW-4SR, and MW-11S) with historical exceedences of the MCL for nickel. This monitoring should continue until no exceedences of MCLs are detected for a period of one year. Once the performance standards are met, EPA will begin the process for Site Close Out and Deletion from the NPL.

SECTION 7.0: STATEMENT OF PROTECTIVENESS

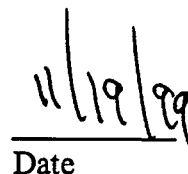
I certify that the remedies prescribed by the RODs for OU1 and OU2 for the Standard Auto Bumper Site remain protective of human health and the environment.

SECTION 8.0: NEXT REVIEW

No subsequent five-year review will be required at the Standard Auto Bumper Site because completion of the selected remedies is expected to occur within the next six months. The Site will then be considered for Closeout and Deletion from the NPL.



Richard D. Green, Director
Waste Management Division


Date